

WHAT IS CLAIMED IS:

1. A power supply device of an LCD (liquid crystal display) module comprising:
  - a plurality of dividing resistors electrically connected in series and having a first end and a second end, said first end being electrically connected to a direct-current power supply for generating an output working voltage between every two adjacent dividing resistors which is then outputted to said LCD module; and
  - a voltage following device electrically connected to said second end of said dividing resistors for regulating said output working voltage through an input of a regulating voltage at said second end.
2. The power supply device according to claim 1, wherein said voltage following device is a voltage follower including an operation amplifier.
3. The power supply device according to claim 1, further comprising a converter for converting an input voltage into a higher voltage to be used as said direct-current power supply.
4. The power supply device according to claim 3, wherein said converter is a DC/DC converter.
5. The power supply device according to claim 1, wherein said LCD module is an STN-LCD module.
6. A LCD module having a regulating working voltage comprising:
  - an LCD panel having a first substrate, a second substrate and a liquid crystal layer;
  - a column driving circuit for generating a column control signal to column drive said LCD panel;
  - a row driving circuit for generating a row control signal to row drive said LCD panel; and

a power supply device as claimed in claim 1 for providing said working voltages to said column driving circuit and said row driving circuit.

7. The LCD module claimed in claim 6, wherein said power supply device of said LCD module comprises:

- a plurality of dividing resistors electrically connected in series and having a first end and a second end, said first end being electrically connected to a direct-current power supply for generating output working voltage between every two adjacent dividing resistors which is then outputted to said LCD module; and

- a voltage following device electrically connected to said second end of said dividing resistors for regulating said output working voltage through an input of a regulating voltage at said second end.

8. The LCD module as claimed in claim 7, wherein said voltage following device is a voltage follower including an operation amplifier.

9. The LCD module as claimed in claim 7, wherein a converter is used as said direct-current power supply for converting an input voltage to a higher voltage to be used as said direct-current power supply.

10. The LCD module as claimed in claim 9, wherein said converter is a DC/DC converter.

11. The LCD module as claimed in claim 7, wherein said LCD module is a STN-LCD module.

12. A power supply device of an LCD module comprising:

- a converter for converting a first voltage into a second voltage;

- a dividing components having a first end and a second end, said first end being electrically connected to said converter for generating a set of working voltages in response to said second voltage so as to be outputted to said LCD module; and

a voltage following device electrically connected to said second end of said dividing components for regulating said set of working voltages through a provision of a regulating voltage.

13. The power supply device as claimed in claim 12, wherein said dividing components comprises a plurality of dividing resistors connected in series.

14. The power supply device as claimed in claim 13, wherein an output working voltage is generated between every two adjacent dividing resistors.

15. A method of regulating a power supply of an LCD module, comprising the following steps:

(a) providing a first voltage;

(b) converting said first voltage into a second voltage;

(c) generating a set of output working voltages in response to said second voltage for being provided to said LCD module; and

(d) providing a regulating voltage for regulating said set of output working voltages.

16. The method as claimed in claim 15, wherein the step (c) further comprises the following steps:

providing a set of dividing components;

electrically connecting said second voltage to a first end of said dividing components; and

outputting said set of output working voltages from said dividing components.

17. The method as claimed in claim 16, wherein said step (d) further comprises the following steps:

providing said regulating voltage;

inputting said regulating voltage into a voltage following device to generate said regulating voltage; and

inputting said regulating voltage into a second end of said dividing components to regulate said set of output working voltages.